R-TOC in DoD Systems Status Report

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Background

- R-TOC established in 1999 by the USD/AT&L
  - Adverse impact of budget and operational trends on force structure and readiness
  - Failure of DoD to keep pace with private sector improvements in logistics and supply chain management
- Pilot Program objectives:
  - Take actions to: improve reliability and maintainability, reduce supply chain response times/footprint, or promote competitive sourcing of product support
  - Maintain or improve readiness while reducing FY05 O&S costs by 20% or more (developmental programs instructed to focus on life cycle O&S costs)
- Continuation of R-TOC endorsed by USD/AT&L Aldridge and PDUSD Wynne

R-TOC Pilot Programs

Army Pilots

Abrams	**Apache**	**Fire Support C2**
CH-47	Comanche	Crusader (terminated)
Guardrail	HEMTT	Precision Fires (MLRS)
TOW-ITAS		

Navy Pilots

AvSptEqt	**H-60**	**SLAM-ER**
AAAV	Aegis Cruisers	CVN-68 Carriers
Common Ship	EA-6B	LPD-17
MTVR		

Air Force Pilots

B-1	**C-5**	**C/KC-135**	**F-16**
AWACS	C-17	Cheyenne Mtn	
F-117	JSTARS	SBIRS	

R-TOC Best Practices

- Development and improvement of R-TOC tools
- Reliability and maintainability
  - Design for reduced O&S; recapitalization and system upgrade; replacement of high O&S cost components and subsystems with COTS
- Supply chain response times/footprint reduction
  - DVD, commercial maintenance agreements, reliability centered maintenance, electronic tech manuals
- Competitive product support
  - TSPR/TSSR, CLS, flexible sustainment, logistics support studies and models, industry-depot partnerships, performance base logistics support

R-TOC Funding

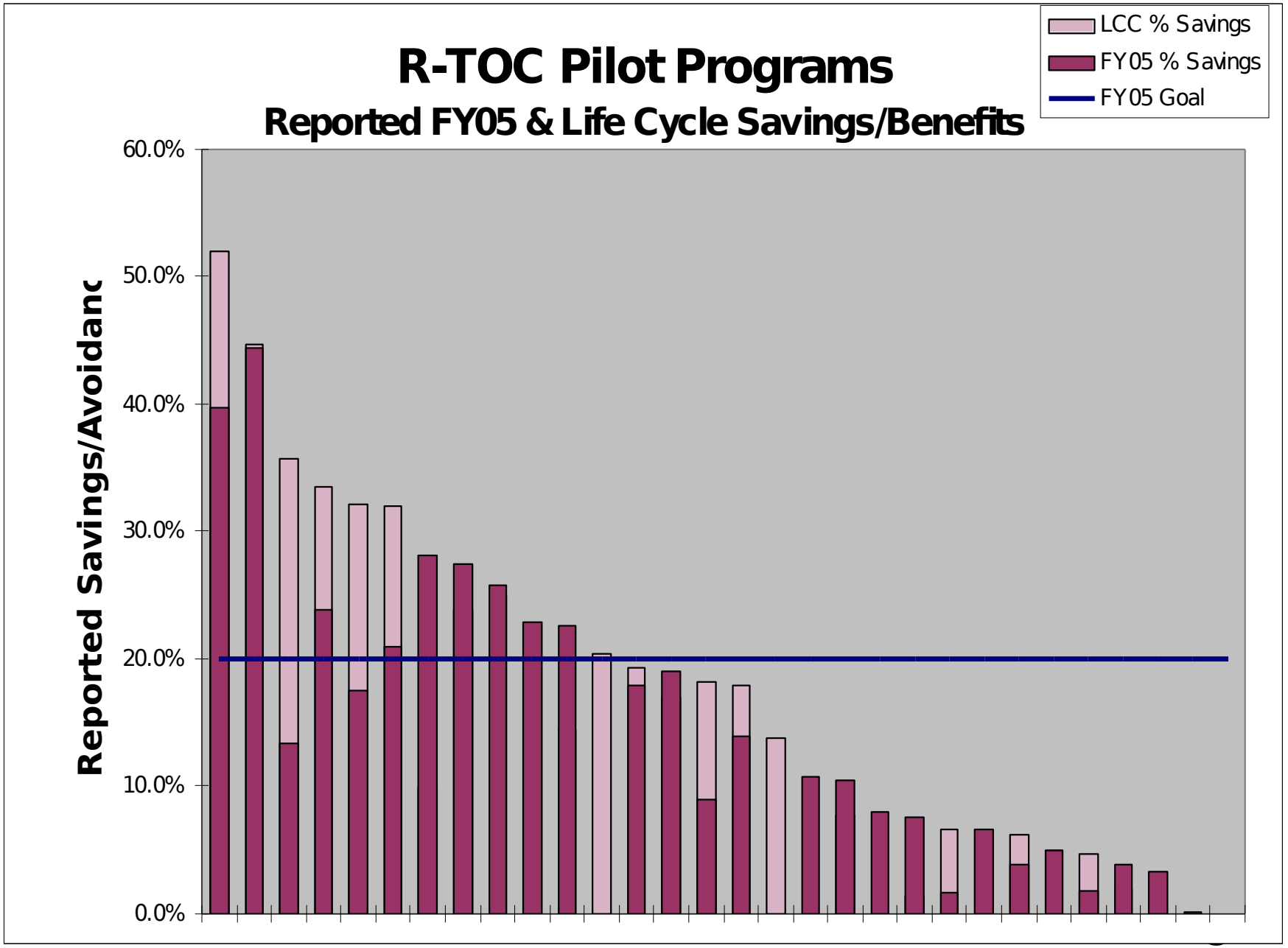
R-TOC Funding

- Original R-TOC PBD 721 approved in 1999
- Second increment of PBD funding approved in December 01
  - Provides $22.5M in additional funding for R-TOC programs (FY03)
  - No offsets; savings retained by Services
- New proposal working through the system
- Services were also asked to document their spending on R-TOC

R-TOC Metrics Input

Metric Goal: 20% Reduction of O&S costs for 30 major pilot programs from the year 1997 (baseline) to the year 2005

- 46% of the eligible 26 R-TOC Pilot Programs project FY05 cost reductions of 18% or greater. Four of the Pilots were excluded (three are developmental and the Crusader was canceled).
- Projected FY05 cost reduction (26 R-TOC Pilot Programs) exceeds $1.3B


R-TOC Pilot Programs
Reported FY05 & Life Cycle Savings/Benefits
LCC % Savings
FY05 % Savings
FY05 Goal
Reported Savings/Avoidanc
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%

R-TOC Implementation

- Excellent cross-fertilization among like systems
  - Ship programs (Aegis, Common Ship, current and future CVNs, LPD-17)
  - Army helicopter systems (CH-47, Apache, Comanche, Blackhawk)
- Several major initiatives support R-TOC objectives
  - DLA supply chain initiatives
  - Army recapitalization
  - DUSD/L&MR performance based logistics

Adoption of R-TOC

- Overall, implementation has been slow
  - Many programs (including Pilots) pursuing a few initiatives, but greater TOC reduction effort is needed
  - Many Pilots not looking for new activities
- Most PMs have focused on issues related to funding
  - Sources of funding, savings retention, etc.
- Process improvements don’t have to cost much
- Programs should implement R-TOC because it makes sense – and many do!!

New R-TOC Tools: CAIV and VE

- USD/AT&L reminder of requirement to perform CAIV tradeoffs (Jan 02 memo)
  - CAIV plan required for all defense programs
  - R-TOC Working Group developed CAIV templates
- CAIV/EA plans were due by 1 October
- Value Engineering recently reassigned to OSD/Defense Systems
  - Has been integrated with R-TOC
- CAIV tradeoffs and VE evaluations are vital components of TOC reduction

Revitalizing Value Engineering

- VE is a proven method for identifying and implementing system improvements
  - Required by law
  - Has languished in DoD in recent years
- OSD-sponsored series of meetings involving Services, industry, and non-profits
  - Potential uses of VE, barriers, and options
- Developed legislative proposal for VE
  - Proposal submitted to OMB
- Re-evaluation of VE procedures, training, etc.

Backup Slides

R-TOC Barriers

July 01 request from PDUSD Mike Wynne generated >60 inputs; consensus on 5 major barriers:

- Color/year of money requirements (annual funding, appropriations categories, reprogramming thresholds and restrictions thresholds, etc.)
- Inadequate processes/tools to perform tradeoffs and measure savings
- Lack of program capital fund/seed money
- No guarantee that saved dollars will be used for the program that saved the dollars (need for savings reinvestment)
- Limited PM control of program life cycle funding (including sustaining engineering)

R-TOC and Acquisition Goals

R-TOC Actions Are Prominent in USD Aldridge's Acquisition Goals

- Goal #1: Acquisition Credibility and Effectiveness
  - Financial reform: reprogramming thresholds, inter-appropriation transfers, MDAP/PPBS integration
  - DLA's Business Systems Modernization
  - Establish Integrated Digital Environment
  - Give PM life cycle responsibility
  - Continue Reduction of Total Ownership Costs
  - Improve logistics responsiveness and supply chain integration
  - Performance-based services acquisition

R-TOC and Acquisition Goals (2)

- Goal #2: Workforce
  - Establish continuous learning modules
  - Establish life-cycle workforce management
- Goal #3: Defense Industrial Base
  - Adopt public-private partnering for depot-level maintenance
- Goal #4: Infrastructure
  - Set competitive sourcing/A-76 goals
- Goal #5: Technology Insertion
  - Promote future use of COSSI

Approved PBD 721 Projects (FY03 and later)

- **Army projects**
  - MLRS position navigation unit
  - Guardrail/ Common Sensor data link
- **Air Force projects**
  - KC-135 radome replacement
  - Aircraft engine electronic tech manuals
- **Navy projects**
  - RFID/MEMS ordnance management
  - Aviation Support Equipment stencils and marking
  - Aegis cruisers stern flap
  - Common Ship magnetic couplings
  - SH-60 fatigue crack monitors
  - EA-6B flight control system

Approved PBD Projects (FY99)

- Army projects
  - CH-47improved rotor blades and common database
  - MLRS tactical proficiency trainer
  - HEMTT interactive electronic tech manuals
  - Blackhawk, advanced lubricant
- Navy projects
  - EA-6B J52 engine component improvement program
  - Lightning protection for minesweepers
  - Laser eye protection
- Air Force projects
  - B-1 digitized tech orders
  - F-117 engine build
  - KC-135 turbine engine monitoring system

CAIV Metrics Input

By the end of FY02, 100% of Defense programs incorporate “cost-as-an-independent variable (CAIV)” and have a spiral development implementation plan in place as a mandatory feature; **Metric Goal: 100% of all MDAPs by end of FY02**

- January 02 Memo from Mr. Aldridge to SAEs on CAIV and Spiral Development Implementation Plans
  - April 02 Memo from Mr. Aldridge on definitions for Evolutionary Acquisition and Spiral Development
- Draft “Templates” for Evolutionary Acquisition and CAIV are in final review
- Programs are completing CAIV and Spiral plans